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5. The method of claim 4 wherein same stent comprises:

a generally cylindrical device having a plurality of struts arranged in a circumferential fashion around said cylinder, said cylinder having a generally longitudinal axis, a radial dimension extending from said longitudinal axis, and a circumferential dimension extending around said axis, and said struts interconnected with one another;

said struts having a length, and said stent capable of being expanded from a first diameter to a second expanded diameter;

said struts having a cross-section comprising a width in said circumferential dimension and a thickness in said radial dimension;

and said strut thicknesses variable along their lengths.

6. The stent of claim 4 used in combination with a balloon catheter.

7. The stent of claim 4 wherein said stent is self-expanding.

8. A stent as in claim 4 wherein said variable strut thickness is varied along the length of the strut so that said strut is thicker at its ends than in its middle.

9. The stent of claim 4 wherein said struts are configured so that there are portions of relative thickness and relative thinness along the length of the stent, and said portions of relative thickness are interspersed between said portions of relative thinness.

10. The stent of claim 4 wherein the stent has a portion of relative thickness at one of said ends, and a portion of relative thinness at a second of said ends.